Amendments to the Claims:

The text of all pending claims, (including withdrawn claims) is set forth below. Canceled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~strikethrough~~. The status of each claim is indicated with one of (original), (currently amended), (canceled), (withdrawn), (new), (previously presented), or (not entered).

Applicant reserves the right to pursue any canceled claims at a later date.

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1.-6. (canceled)

7. (currently amended) A process absorption spectrometer for a gas comprising:

a first unit containing a source of radiation, wherein the first unit is designed as a filed device having a first communication device, and wherein the first unit is connectable to a field bus via the first communication device; and

at least one second unit containing a detector, wherein the ~~first and the~~ second units ~~is~~are designed as field devices having a second communication device, and wherein the second unit ~~are~~ is connectable to ~~the~~a field bus via the second communication device.

8. (currently amended) The process absorption spectrometer according to claim 7, wherein the second unit comprises a mechanism to generate a measurement result from measurement signals of the detector and from signals transmitted from the first unit to the second unit, and wherein the signals are at least partially transmittable via the field bus.

9. (canceled)

10. (previously presented) The process absorption spectrometer according to claim 9, wherein the first and the second units are designed to communicate with one another via the field bus according to a slave-slave transmission method.

11. (previously presented) The process absorption spectrometer according to claim 7, wherein the source of radiation is modulated with at least one part of signals transmitted from the first unit to the second unit, and wherein in the second unit the signals transmitted from the first unit to the second unit are separated from measurement signals of the detector by demodulation.

12. (previously presented) The process absorption spectrometer according to claim 8, wherein the source of radiation is modulated with at least one part of signals transmitted from the first unit to the second unit, and wherein in the second unit the signals transmitted from the first unit to the second unit are separated from measurement signals of the detector using demodulation.

13. (previously presented) The process absorption spectrometer according to claim 9, wherein the source of radiation is modulated with at least one part of signals transmitted from the first unit to the second unit, and wherein in the second unit the signals transmitted from the first unit to the second unit are separated from measurement signals of the detector by using demodulation.

14. (previously presented) The process absorption spectrometer according to claim 10, wherein the source of radiation is modulated with at least one part of signals transmitted from the first unit to the second unit, and wherein in the second unit the signals transmitted from the first unit to the second unit are separated from measurement signals of the detector by demodulation.

15. (previously presented) The process absorption spectrometer according to claim 7, wherein the first unit comprises means for generating a measurement result from measurement signals of the detector, and wherein the measurement signals are transmittable from the second unit to the first unit via the field bus.

16. (previously presented) The process absorption spectrometer according to claim 8, wherein the first unit comprises means for generating a measurement result from measurement signals of the detector, and wherein the measurement signals are transmittable from the second unit to the first unit via the field bus.

17. (previously presented) The process absorption spectrometer according to claim 9, wherein the first unit comprises means for generating a measurement result from measurement signals of the detector, and wherein the measurement signals are transmittable from the second unit to the first unit via the field bus.

18. (previously presented) The process absorption spectrometer according to claim 10, wherein the first unit comprises means for generating a measurement result from measurement signals of the detector, and wherein the measurement signals are transmittable from the second unit to the first unit via the field bus.

19. (previously presented) The process absorption spectrometer according to claim 11, wherein the first unit comprises means for generating a measurement result from measurement signals of the detector, and wherein the measurement signals are transmittable from the second unit to the first unit via the field bus.

20. (currently amended) A process absorption spectrometer, comprising: ~~with~~

a first unit containing a source of radiation; ~~and~~

a second~~t least one additional~~ unit containing a detector, wherein the first unit and the second ~~with both~~ units are separately~~being designed as pieces of field equipment and being~~ connected to a field bus, wherein the field bus is connected to a master device, wherein the master device is a process controller.

21. (previously presented) The process absorption spectrometer according to claim 20, wherein the additional unit containing the detector contains means to generate a measurement result from measurement signals of the detector and additional signals which are transmitted from the unit containing the source of radiation to the additional unit containing the detector.

22. (previously presented) The process absorption spectrometer according to claim 21, wherein the additional signals are at least partially transmitted via the field bus.

23. (previously presented) The process absorption spectrometer according to claim 22, wherein the two units communicate with one another via the field bus according to a slave-slave transmission method.

24. (previously presented) The process absorption spectrometer according to claim 20, wherein the source of radiation is modulated with at least one part of additional signals, and wherein in the additional unit the additional signals are separated from measurement signals of the detector by means of demodulation.

25. (previously presented) The process absorption spectrometer according to claim 20, wherein the unit containing the source of radiation contains means for generating a measurement result from measurement signals of the detector, and wherein the measurement signals are transmitted from the additional unit to the unit containing the source of radiation using the field bus.

26. (new) The process absorption spectrometer according to claim 7, wherein a power is supplied to the first unit via the field bus and a power is supplied to the second unit via the field bus.

27. (new) The process absorption spectrometer according to claim 20, wherein a power is supplied to the first unit via the field bus and a power is supplied to the second unit via the field bus.